

Setup Guide: AI Tools for Economics Research

EC-350 International Economics
Instructor: Christopher Ball
Department of Economics, Quinnipiac University

Aman Desai

2026-01-24

Table of contents

Introduction	4
Part 1: Install Git	4
For Windows	4
Download Git	4
Run Installer	4
Verify Installation	4
For macOS	5
Download Git	5
Install Git	5
Verify Installation	5
For Linux (Ubuntu/Debian)	5
Install via Terminal	5
Verify Installation	5
Part 2: Create GitHub Account & Enable Copilot	6
Create GitHub Account	6
For First-Time Users	6
Enable GitHub Education (Free Copilot)	6
Get GitHub Copilot Free as a Student	6
If Approval Takes Time:	6
Set Up Git Configuration	6
On Windows: Open Command Prompt	7
On macOS/Linux: Open Terminal	7
Run These Commands	7

Part 3: Install Positron IDE	8
For Windows	8
Download Positron	8
Run Installer	8
Launch Positron	8
For macOS	8
Download Positron	8
Install	9
Verify Launch	9
For Linux	9
Ubuntu/Debian Installation	9
Part 4: Configure GitHub Copilot in Positron	10
Open Positron Extensions	10
Install GitHub Copilot Extension	10
Authenticate with GitHub	10
Test Copilot in Positron	10
Create a test R script:	10
Part 5: Verify All Tools Work Together	11
Checklist: All Systems Go!	11
Troubleshooting	11
“Git command not found”	11
“Can’t see GitHub Copilot in Extensions”	11
“GitHub says I’m not verified as student”	11
“Positron won’t launch”	11
Part 6: Additional Resources	12
Free Tools for Economics Students	12
Free Resources with GitHub Student Pack	12
Free Alternatives if You Hit Issues	12
Recommended Tutorials (Before Class)	12
Getting Help	12
Before Class	12
During Class	12
After Class	13

Quick Reference: Commands You'll Need	14
Git Commands (Copy-Paste Ready)	14
Positron Shortcuts (Essential)	14
Final Preparation Checklist	15
One Week Before Class	15
Day Before Class	15
During Class	15

Introduction

Before your first session, you need to install and configure three essential tools:

1. **Positron** - Your integrated development environment (IDE)
2. **GitHub Account & GitHub Copilot** - Version control and AI code assistance
3. **Git** - The command-line tool that powers GitHub

This guide provides step-by-step instructions for all major operating systems. **Estimated total time: 30-45 minutes.**

Note: All software is free for Quinnipiac students!

Part 1: Install Git

Git is the underlying version control system. You need this before GitHub will work properly.

For Windows

Download Git

1. Visit <https://git-scm.com/download/win>
2. Click the download link (should auto-detect your Windows version)
3. File will be named something like `Git-2.44.0-64-bit.exe`

Run Installer

1. Double-click the downloaded .exe file
2. Click “Next” through the installer (defaults are fine)
3. When asked about “Choosing the default editor”, select “Use Visual Studio Code as Git’s default editor” (or Notepad if you prefer)
4. Continue clicking “Next” until you see “Install” button
5. Click “Install” (may take 2-3 minutes)
6. Click “Finish”

Verify Installation

1. Press **Windows Key + R**
2. Type `cmd` and press Enter
3. In the command prompt, type:

```
git --version
```

4. You should see output like: `git version 2.44.0.windows.1`

Git is installed!

For macOS

Download Git

1. Visit <https://git-scm.com/download/mac>
2. Download the installer for your Mac version (Intel or Apple Silicon)

Install Git

1. Double-click the downloaded .dmg file
2. Double-click the “**Git Installer**” package
3. Follow the installer prompts (defaults are fine)
4. Enter your Mac password when prompted
5. Click “**Install Software**” and wait for completion

Verify Installation

1. Open **Terminal** (Applications ▢ Utilities ▢ Terminal)
2. Type:

```
git --version
```

3. You should see: `git version 2.xx.x`

Git is installed!

For Linux (Ubuntu/Debian)

Install via Terminal

Open Terminal and run:

```
sudo apt update
sudo apt install git
```

Verify Installation

```
git --version
```

Git is installed!

Part 2: Create GitHub Account & Enable Copilot

Create GitHub Account

For First-Time Users

1. Visit <https://github.com>
2. Click **"Sign up"** in the top right
3. Enter your **email** (use your Quinnipiac email recommended)
4. Create a **password** (something secure, 12+ characters)
5. Choose a **username** (e.g., `firstname-lastname` or something professional)
 - Tip: This will be visible in your portfolio, so keep it professional!
6. Choose **"No"** for email preferences (unless you want marketing emails)
7. Click **"Create account"**
8. Verify your email by clicking the link GitHub sends you

GitHub account created!

Enable GitHub Education (Free Copilot)

Get GitHub Copilot Free as a Student

1. On GitHub, go to your **Profile** (top right corner) -> **Settings**
2. Click **"Billing and plans"** in left sidebar
3. Click **"Plans and usage"**
4. You should see option to **"Join GitHub Student"** or **"Upgrade to GitHub Copilot"**
5. Click **"Join GitHub Student Developer Pack"**
6. **Verify as student:**
 - Upload a screenshot of your student ID (front side with your name visible)
 - Add your `.edu` email or screenshot of enrollment document
 - Click **"Process application"**
7. Wait for approval (usually 5-30 minutes)

GitHub Copilot enabled for free!

If Approval Takes Time:

- You can still use GitHub for version control
- Positron will work fine
- Copilot will activate once approved
- Don't worry—it will work during class!

Set Up Git Configuration

Before using Git on your computer, tell it who you are:

On Windows: Open Command Prompt

Press **Windows Key + R**, type `cmd`, press Enter.

On macOS/Linux: Open Terminal

Applications ▢ Utilities ▢ Terminal (Mac) or your terminal app (Linux).

Run These Commands

Replace the email and name with your actual information:

```
git config --global user.email "your.email@quinnipiac.edu"
git config --global user.name "Your Full Name"
```

Example:

```
git config --global user.email "john.smith@quinnipiac.edu"
git config --global user.name "John Smith"
```

Verify with:

```
git config --global --list
```

You should see your email and name printed.

Git configured!

Part 3: Install Positron IDE

Positron is your integrated development environment (IDE) for R and Python. It's specifically designed for data science workflows. This setup assumes you have already installed the latest version of R. If not, please install R before proceeding.

- **Windows:** [Download R for Windows](#)
- **macOS:** [Download R for macOS](#)

For Windows

Download Positron

1. Visit <https://github.com/posit-dev/positron/releases> (official Positron releases page)
2. Look for the latest release at the top
3. Download the file named something like: `Positron-2024.12.0-setup-x64.exe`
 - Make sure it says "Windows" or "setup-x64.exe"

Run Installer

1. Double-click the downloaded .exe file
2. Click **"I agree to the license agreement"**
3. Click **"Next"** through the installer
4. Choose your installation location (default is fine): `C:\Users\[YourName]\AppData\Local\Programs\Positron`
5. Click **"Install"**
6. Wait 2-3 minutes for installation
7. Click **"Finish"**

Launch Positron

1. Press **Windows Key** and type "Positron"
2. Click the **Positron** app when it appears
3. First launch may take 30 seconds to initialize
4. You should see the Positron interface (looks like VSCode + RStudio combined)

Positron installed!

For macOS

Download Positron

1. Visit <https://github.com/posit-dev/positron/releases>
2. Download the file for your Mac:
 - **Apple Silicon** (newer Macs, M1/M2/M3): `Positron-2024.12.0-arm64.dmg`
 - **Intel Mac** (older Macs): `Positron-2024.12.0-x64.dmg`
 - Don't know which? Apple Menu -> About This Mac -> Look at "Chip"

Install

1. Double-click the downloaded .dmg file
2. Drag the **Positron** icon to **Applications** folder
3. Wait for copy to complete
4. Open **Finder** -> **Applications** -> Double-click **Positron**
5. Click “**Open**” if you get a security prompt

Verify Launch

Wait 30 seconds for Positron to load. You should see the main interface.

Positron installed!

For Linux

Ubuntu/Debian Installation

```
# Download latest release (check posit-dev/positron for exact version)
wget https://github.com/posit-dev/positron/releases/download/2024.12.0/Positron-2024.12.0-amd64.deb

# Install
sudo dpkg -i Positron-2024.12.0-amd64.deb

# Launch
positron
```

Positron installed!

Part 4: Configure GitHub Copilot in Positron

Once Positron is open, you need to connect it to GitHub Copilot.

Open Positron Extensions

1. Click the **Extensions** icon in the left sidebar (looks like four squares)
2. In the search box, type: `copilot`
3. Look for **"GitHub Copilot"** (should be the top result)

Install GitHub Copilot Extension

1. Click on **"GitHub Copilot"** extension
2. Click the **"Install"** button
3. Wait for installation to complete (30 seconds - 1 minute)

Authenticate with GitHub

1. After installation, you'll see an **"Authorize"** or **"Sign in"** button
2. Click **"Sign in with GitHub"**
3. Your default browser will open to GitHub authorization page
4. Click **"Authorize GitHub Copilot Plugin"** (or similar)
5. GitHub will redirect back to Positron
6. You should see: **"Successfully authenticated"** □

Test Copilot in Positron

Create a test R script:

1. Click **"File"** -> **"New File"** -> **"R Script"**
2. Type a comment:

```
# Function to calculate mean
```

3. Press **Enter** to go to next line
4. Start typing: `mean_calc <-`
5. **GitHub Copilot should suggest code!**
6. Press **Tab** to accept the suggestion
7. See gray text appearing? That's Copilot! □

GitHub Copilot is working!

Part 5: Verify All Tools Work Together

Before class, run through this final checklist:

Checklist: All Systems Go!

- ☐ **Git installed:** Open Terminal/Command Prompt, type `git --version` -> See version number
- ☐ **GitHub account created:** Can log in at github.com
- ☐ **GitHub Copilot enabled:** See checkmark on your GitHub account (Settings -> Billing and plans)
- ☐ **Positron installed:** Can launch from Applications/Start menu
- ☐ **Positron extensions:** Extensions sidebar shows GitHub Copilot installed
- ☐ **GitHub Copilot authenticated:** Sign-in shows “Successfully authenticated”
- ☐ **Copilot test:** Write R comment, see gray suggestion text appear

Troubleshooting

“Git command not found”

- **Windows:** Restart Command Prompt completely after installing Git
- **Mac/Linux:** Restart Terminal or run `source ~/.bash_profile`

“Can’t see GitHub Copilot in Extensions”

- Make sure you’re using the latest Positron version
- Try clicking the Extensions tab refresh icon
- Restart Positron

“GitHub says I’m not verified as student”

- Copilot will work once approved (usually within 30 minutes)
- You can still do everything else; Copilot will activate later
- Don’t worry—it will work during class!

“Positron won’t launch”

- **Windows:** Try restarting your computer
- **Mac:** If you see “Cannot open” error, right-click app -> Open -> Open again
- **Linux:** Run `positron` from terminal to see error messages

Part 6: Additional Resources

Free Tools for Economics Students

Free Resources with GitHub Student Pack

With GitHub Student verification, you also get: - **GitHub Copilot**: Free (already done!) - **JetBrains IDEs**: Free (PyCharm, IntelliJ, etc.) - **AWS Cloud Credits**: \$150/year - **DigitalOcean**: \$100/year - Many more at: <https://education.github.com/pack>

Free Alternatives if You Hit Issues

Tool	Purpose	Free Option
R IDE	Data analysis	Positron (installed), RStudio (free version)
Version Control	Code management	GitHub (free tier)
AI Coding	Code assistance	ChatGPT free tier + GitHub Copilot (student)
Data Sources	Economics data	World Bank, FRED, OECD (all free)

Recommended Tutorials (Before Class)

Short videos

1. **GitHub for Beginners**: [GitHub Tutorial For Beginners](#)
2. **Positron IDE Tour**: [A quick tour of Positron](#)

Written guides:

- Posit Documentation: <https://posit.co/>
- GitHub Guides: <https://guides.github.com/>
- Pro Git Book (free): <https://git-scm.com/book/en/v2>

Getting Help

Before Class

- **Installation issues?**
 - Drop by my office at EC 234 (MoWeFri 3:00pm to 4:15pm)
 - Email me to set up a Zoom meeting: aman.desai@quinnipiac.edu
- **Copilot not working?** It's OK—will work during class

During Class

- Speak up (in-person)
- I'll help troubleshoot in real-time
- We have time built in for setup

After Class

- Office hours: MoWeFri 3:00pm to 4:15pm
- Email: aman.desai@quinnipiac.edu

Quick Reference: Commands You'll Need

Git Commands (Copy-Paste Ready)

```
# Configure Git (one time only)
git config --global user.email "your.email@quinnipiac.edu"
git config --global user.name "Your Full Name"

# Clone a repository from GitHub
git clone https://github.com/username/repository-name.git

# Check what files changed
git status

# Add files to commit
git add filename.R
git add . # Add all files

# Commit with message
git commit -m "Describe your changes here"

# Push to GitHub
git push origin main

# Pull latest changes from GitHub
git pull origin main

# View commit history
git log --oneline
```

Positron Shortcuts (Essential)

Action	Windows	Mac
Run current line	Ctrl+Enter	Cmd+Enter
Run all code	Ctrl+Shift+Enter	Cmd+Shift+Enter
Comment out line	Ctrl+/	Cmd+/
Open Terminal	Ctrl+ Ctrl+	
Open Extensions	Ctrl+Shift+X	Cmd+Shift+X
Find file	Ctrl+P	Cmd+P
Command Palette	Ctrl+Shift+P	Cmd+Shift+P

Final Preparation Checklist

One Week Before Class

- ☐ Downloaded and installed Git
- ☐ Created GitHub account with .edu email
- ☐ Applied for GitHub Student verification
- ☐ Downloaded and installed Positron
- ☐ Installed GitHub Copilot extension in Positron
- ☐ Authenticated GitHub Copilot (Successfully authenticated)
- ☐ Tested Copilot with sample R code
- ☐ Configured Git with `git config` commands

Day Before Class

- ☐ Launch Positron to verify it still works
- ☐ Try writing a short R script with Copilot suggestions
- ☐ Bookmark: github.com, quarto.org, posit.co

During Class

All tools ready to use!

- We'll start by creating your first GitHub repository.
- By end of the semester, you'll have your course project on GitHub.